

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017546**Date Inspected:** 06-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr.Qiu Wen.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower and Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

NDT

BAY 10

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as Tower façade plate. The weld designations reviewed are as follows.

ED1-SFSA3-45-2A/B, 8, 14, 18, 20,

ED1-SFSA3-46-1, 4, 6,

ED1-SFSA3-32-6, 8, 15, 20, 26, 30, 35, 40, 46, 70, 72,

ED1-SFSA3-29-2-1, 4, 8, 12, 18, 20,

NDT Notification No-06870

This QA Inspector observed the following work in progress:

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SMAW PROCESS:

This QA Inspector observed ZPMC qualified welding personnel identified as 046769, 041271, Perform Shielded Metal Arc Welding (SMAW) on Lift 5 bracket stiffener. Joint identified as SD1-BRSA5-1-14A, 10A. ZPMC CWI Identified as Yu Dong Ping. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3213-Tc-U4b.

OBG Bike path Bottom plate FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 054460, Perform Flux Core Arc Welding (FCAW) on OBG bike path bottom plate. Joint identified as BK004A2-020-016, 018 and BK004A2-021-018, 016. ZPMC CWI Identified as Yu Dong Ping. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2231-B-4b-F-1.

OBG Bike path FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040704, 053316, Perform Flux Core Arc Welding (FCAW) on OBG bike path bottom plate. Joint identified as BK004A1-020-043. ZPMC QC Identified as Mao Bin Bin. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2232-Tc-U4c-F. For more information see below attached picture number 1.

BAY 10

Tower Facade plate SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 056364, Perform Shielded Metal Arc Welding (SMAW) on Tower façade plate. Joint identified as SD1-SFSA4-29A/B-12, 13, 14, 15. ZPMC QC Identified as Yin Chun Fang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2112.

This QA Inspector observed ZPMC qualified welding personnel identified as 053829, Perform Shielded Metal Arc Welding (SMAW) on Tower façade plate. Joint identified as SD1-SFSA3-39-11, 12, 13. ZPMC QC Identified as Wang Hao. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2112-Pad eye.

This QA Inspector observed ZPMC qualified welding personnel identified as 053829, Perform Shielded Metal Arc Welding (SMAW) on Tower façade plate. Joint identified as SD1-SFSA3-24-11, 12, 13, 14. ZPMC QC Identified as Wang Hao. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2112-Pad eye.

This QA Inspector observed ZPMC qualified welding personnel identified as 053829, Perform Shielded Metal Arc Welding (SMAW) on Tower façade plate. Joint identified as ND1-SFSA3-21-11, 12, 13, 14. ZPMC QC Identified as Wang Hao. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2112-Pad eye.

Magnetic Particle Testing:

This QA Inspector observed ZPMC Magnetic Particle Testing Inspector, performing MT on Tower façade plate. Plate identified as ED1-SFSA3-32, ED1-SFSA3-29. For more information see attached picture number 2.

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Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Michael Ng Phone: 15921845703, who represents the Office of Structural Materials for your project.

Inspected By: Gaikwad,Shailesh

Quality Assurance Inspector

Reviewed By: Clifford,William

QA Reviewer